

OCIO Notes:

- We are using Open, Systems Testing Architecture (Open STA) to measure the performance of the WorkLenz servers. Open STA is a free, open-source server performance-testing tool that can be obtained at <http://www.opensta.org/>.
- Open STA uses scripts to emulate user activity on a server. The server's responses to the emulated user activity are measured to determine the server's performance level.
- This document shows how recent WorkLenz code changes have improved the performance of the WorkLenz production server.
- We will be using this same tools and techniques to measure future hardware and software upgrades to WorkLenz.
- These tools and this technique can also be used to measure differences in WorkLenz performance at various points across the USDA network.
- For more info, contact John P. Rehberger at 202-720-5223.

Script Scenario

Performance testing was scripted to emulate a typical user. The script executed the following steps:

1. Log into the specified site.
2. View the splash screen.
3. Allow user to be redirected to the appropriate summary screen.
4. Navigate to the task list screen.
5. Navigate to the project list screen.
6. Navigate through the project list screen to choose the specified project.
7. Select the specified project and view the Project Summary screen.
8. Select the Admin link.
9. Select the Assessment link.
10. View the Assessment List screen.
11. Select the "FY2007 Exhibit 300" Assessment.
12. View the Assessment.
13. Exit the Assessment.
14. Logoff.

Results on USDA's WorkLenz Production Server

Total Elapsed Time

	Run 1	Run 2	Run 3	Average
Baseline Performance, 5 Users	5:53	8:24	5:53	6:44
Upgrade Performance, 5 Users	5:07	5:03	5:08	5:06
Baseline Performance, 50 Users	46:03:00	48:09:00	47:15:00	47:09:00
Upgrade Performance, 50 Users	42:57:00	41:04:00	43:53:00	42:38:00

Percent Decrease: Baseline to Upgrade

5 Users	24.25%
50 Users	9.58 %

Sample Open STA performance graph

